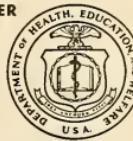


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NATIONAL COMMUNICABLE DISEASE CENTER



Morbidity and Mortality

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Vol. 17, No. 4

WEEKLY
REPORTWeek Ending
January 27, 1968

PUBLIC HEALTH SERVICE

BUREAU OF DISEASE PREVENTION AND ENVIRONMENTAL CONTROL

CURRENT TRENDS
INFLUENZA - United States

There continues to be total excess mortality, excess pneumonia and influenza mortality, and excess mortality in the group aged 65 and over in the United States; however, excess mortality appears to have reached a peak (Figure 1). Pneumonia and influenza deaths were above the epidemic threshold in all divisions except the Mountain division. This is the first week in which there has been excess mortality in the Pacific division, where the major source of excess deaths appears to be in the state of Washington. This is consistent with previous reports of influenza outbreaks in that state (MMWR, Vol. 17, No. 1) and recently received additional reports.

To date, the only states which have not officially

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reported influenza-like illness to NCDC this season are Alaska, Arizona, California, Hawaii, Idaho, and Nevada.

Although outbreaks of influenza-like illness have been

(Continued on page 31)

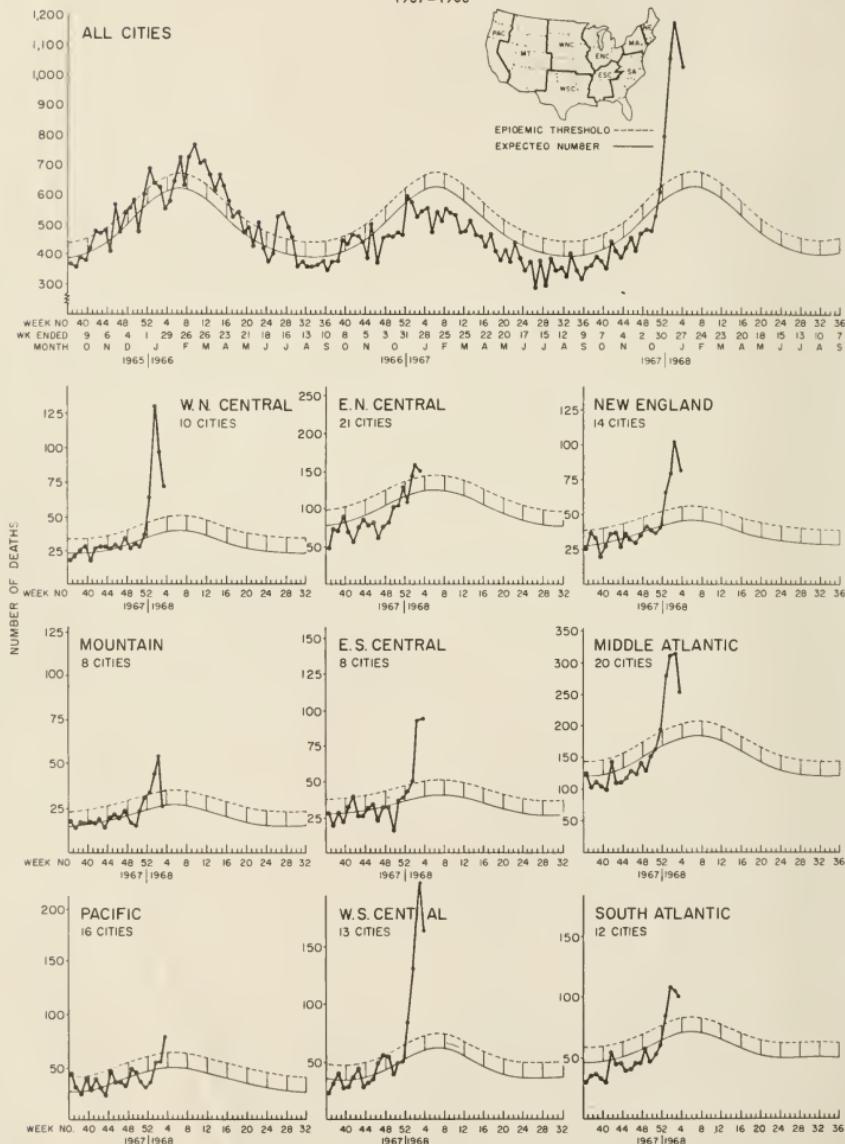
TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	4th WEEK ENDED		MEDIAN 1963 - 1967	CUMULATIVE, FIRST 4 WEEKS		
	JANUARY 27, 1968	JANUARY 28, 1968		1968	1967	MEDIAN 1963 - 1967
Aseptic meningitis			27	106	115	115
Brucellosis		6	6	2	13	18
Diphtheria	3	4	8	6	13	
Encephalitis, primary:						
Arthropod-borne & unspecified				66	79	---
Encephalitis, post-infectious		20	---	32	32	---
Hepatitis, serum	12	---		260	138	
Hepatitis, infectious	30	851	851	3,043	2,830	3,103
Malaria	811	22	4	157	89	9
Measles (rubella)	841	1,972	7,060	1,817	6,011	21,879
Meningococcal infections, total	341	1,972	50	289	235	235
Civilian	44	44	---	275	218	
Military	87	41	---	14	17	---
Mumps	10	3	---	17,390	---	---
Poliomyelitis, total	4,345	---	---			
Paralytic	1	1	1	1	1	1
Rubella (German measles)	546	641	---	1,898	2,047	---
Streptococcal sore throat & scarlet fever	11,150	12,789	10,177	42,136	43,290	36,482
Tetanus	4	4	4	5	10	11
Tularemia	3	4	5	5	13	17
Typhoid fever	1	10	9	17	19	19
Typhus, tick-borne (Rky. Mt. spotted fever)	—	1	—	2	4	3
Rabies in animals	89	78	81	237	283	283

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	—	Rabies in man:	—
Botulism:	—	Rubella, Congenital Syndrome:	—
Leptospirosis: Tenn.-I	1	Trichinosis: Conn.-I	3
Plague:	—	Typhus, murine:	—
Psittacosis:	2	Polio, Unsp.	—

Figure 1
PNEUMONIA-INFLUENZA DEATHS IN 122 UNITED STATES CITIES
1967-1968



INFLUENZA - United States (Continued from front page)

reported from Colorado, Montana, New Mexico, Utah, and Wyoming, in general, activity in the Mountain division has not appeared to be as widespread as that in the eastern and central United States. In the eastern and central United States, influenza activity appears to be decreasing. In

most areas, school and industrial absenteeism has returned to normal rates.

(Reported by Respiratory Diseases Unit, Viral Diseases Section, NCDC.)

PRELIMINARY INFLUENZA LABORATORY FINDINGS

Preliminary laboratory findings of reciprocal hemagglutination inhibition tests on influenza viruses including recent isolates from the 1967-68 season indicate that the current viruses constitute a homogeneous group of strains closely related to isolates from the 1966-67 influenza season. While the newer isolates stimulate the production of broadly reacting serum antibodies, these strains do continue to show an antigenic drift away from the A2/Tai-

wan/1/64 component of the current vaccine. Their relationships to the second vaccine A2 component, A2/Japan/170/62; vary; but, in general, the recent isolates appear to be antigenically closer to this strain than to A2/Taiwan/1/64.

(Reported by the WHO International Influenza Center for the Americas, National Communicable Disease Center, Atlanta.)

INTERNATIONAL NOTES
INFLUENZA - 1967-68

Further official reports of influenza activity were received by the World Health Organization from the following countries:

Norway: During November, local outbreaks of influenza-like illness occurred in western Norway. Serologic evidence of infection with A2 virus was obtained.

(Jan. 9, 1968)* — Since the beginning of January, a high incidence of influenza-like illness has been reported in Oslo. A strain of virus A2 was isolated.

(Jan. 18, 1968) — Influenza is now widespread in east Norway. Several strains of virus A2 have been isolated.

United Kingdom: (Dec. 12, 1967) — At the end of November, an outbreak of influenza-like disease was reported in a boys' boarding school in north England. Two influenza A2 strains were isolated from this outbreak. (Dec. 29, 1967) — Influenza activity was noted in London in approximately the third week of December.

(Jan. 5, 1968) — In the first week of 1968, a sharp rise in influenza deaths occurred in England and Wales. Over 50 percent of the deaths occurred in persons aged 75 years or over.

Denmark (Dec. 13, 1967) — Serologic evidence of influenza A was obtained in early December from three patients in various parts of the country, although no significant increase was noted in reported clinical influenza. (Jan. 6, 1968) — In middle and late December 1967, a rise in reported cases of influenza occurred in the greater Copenhagen area. The disease was reported as generally mild.

Yugoslavia (Jan. 10, 1968) — An influenza epidemic associated with virus A2 has been reported in Croatia. In

eastern Yugoslavia no outbreaks of influenza-like disease have been reported.

Italy (Jan. 5, 1968) — An epidemic of influenza-like disease has been occurring in Rome. Two strains of influenza A2 virus have been isolated.

Netherlands (Jan. 5, 1968) — Small localized outbreaks of influenza-like illness have occurred since mid-December in the western part of the country. Strains of virus A2 have been isolated, and serologic evidence of infection with virus A has been obtained. The disease seems to be spreading to the eastern part of the country.

Federal Republic of Germany (Jan. 19, 1968) — In Niedersachsen in the past 10 days an increase in incidence of influenza-like illness in children and adults has been noted. Four strains of virus A2 were isolated.

Sweden (Jan. 15, 1968) — A slight increase in the incidence of influenza-like illness has been reported from the cities of Helsingborg, Malmö and Göteborg, on the west coast. In three cities and in Eskilstuna serologic evidence of infection with A2 virus has been obtained in approximately 20 cases.

Switzerland (Jan. 13, 1968), **Finland** (Jan. 3, 1968), and **France** (Jan. 18, 1968) — No increases in incidence of influenza-like illness have been reported to date for this season from Switzerland, Finland, or France.

(Compiled from the Weekly Epidemiological Record, WHO, Vol. 42, Nos. 50-52 and Vol. 43, Nos. 1-4.)

*Dates in parentheses refer to date of original information submitted to WHO.

FURTHER REPORTS OF INFLUENZA-LIKE ILLNESS

The following reports from the Canal Zone and Jamaica on influenza-like disease have been received by NCDC:

Canal Zone Influenza A2 — Outbreaks of influenza-like illness began in the second week of December 1967 in the Canal Zone. An A2 influenza virus was isolated. It is interesting that this is the first time the Canal Zone and the United States have noted simultaneous outbreaks of A2 influenza. The outbreaks were occurring before the annual Christmas increase in travel to and from the United States.

(Reported by Sidney B. Clark, M.D., Chief, Division of Preventive Medicine, Canal Zone Health Department, and Karl M. Johnson, M.D., Director, Middle America Research Unit, National Institutes of Health, Walter Reed Army Institute of Research, Balboa Heights, Canal Zone.)

Jamaica Influenza B — In late November and early December 1967, a number of persons with influenza-like illness were seen at the University of the West Indies hospital in Kingston, Jamaica. The illnesses consisted of fever, cough, coryza, and rather striking myalgia. In some cases, acute illness lasted as long as 1 week with cough

often persisting a second week. Hemagglutination inhibition tests demonstrated diagnostic rises against influenza B antigens in six paired sera, and diagnostic rises against A2 antigens in two paired sera; two paired sera were diagnostic for influenza B infection by complement fixation tests. The data are suggestive of influenza B activity, the first reported in the western hemisphere this season; the possibility of influenza A infection cannot be eliminated at this time. Further laboratory investigation is in progress.

Jamaica had major epidemics of A2 influenza in 1957 and 1963. Smaller focal outbreaks of A2 influenza occurred in the latter months of 1965. No major outbreaks of influenza-like illness have been observed on the island since October 1965. Influenza B has never attained epidemic proportion in Jamaica.

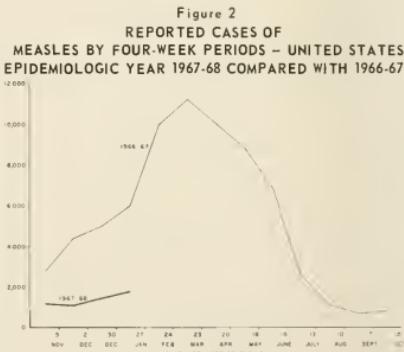
(Reported by Dr. Louis S. Grant, Head, Department of Microbiology, University of the West Indies, Kingston, Jamaica; Dr. Leslie Spence, Director, Trinidad Regional Virus Laboratory; Dr. C. C. Wedderburn, Chief Medical Officer, Ministry of Health, Kingston, Jamaica; and an EIS Officer.)

CURRENT TRENDS
MEASLES

During the first 4 weeks of 1968, 1,817 cases of measles were reported to NCDC. This is less than one third of the 6,011 cases reported for the comparable 4 weeks in 1967 (Figure 2). Similarly, it is 5.7 percent of the 5-year mean (31,897) for the first 4 weeks of years 1958-62 that preceded the general availability of measles vaccine. A seasonal increase in reported measles cases is noted in this 4-week total.

Of the 541 cases of measles reported for the week ending January 27, 1968, 127 (23.5 percent) were reported from Chicago. These cases are now the subject of intensive epidemiologic investigation.

(Reported by State Services Section and Statistics Section, NCDC.)

EPIDEMIOLOGIC NOTES AND REPORTS
FOLLOW-UP MENINGOCOCCAL INFECTION — Mississippi

Since January 19, 1968, two additional cases (case 9 on January 21 and case 10 on January 22) of meningococcal infection have occurred at a Mississippi state hospital (MMWR, Vol. 17, No. 3). Both cases, confirmed bacteriologically as Group B meningococci, occurred in residents from the same floor as the previous eight cases. Since January 15, no deaths have occurred, and since January 22, no other cases of meningococcal infection have been reported in residents either from the floor with 10 cases or

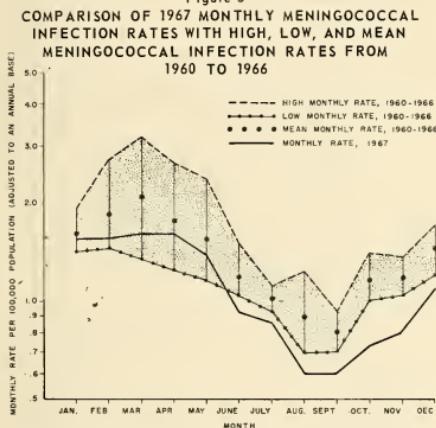
from any other building of the hospital.

(Reported by William Jaquith, M.D., James Head, M.D., and Manning Hudson, M.D., Mississippi State Hospital, Whitefield, Mississippi; A. L. Gray, M.D., M.P.H., Executive Officer, and Durward L. Blakey, M.D., M.P.H., Director, Preventable Disease Control, Mississippi State Board of Health; and Epidemiological Services Laboratory Section, NCDC, and a team of EIS Officers.)

**ANNUAL SURVEILLANCE SUMMARY
MENINGOCOCCAL INFECTIONS - 1967**

During 1967, 2,164 cases of meningococcal infection were reported to NCDC. This was a decrease of 36 percent from the 3,381 cases reported during 1966. The incidence rates from June through December 1967 were the lowest observed since 1960 (Figure 3), and the incidence rates for each month were lower than those for comparable months in 1966. The usual seasonal upward trend in monthly rates became apparent in October 1967, and further increases may be expected in the first quarter of 1968.

Figure 3



Decreases in reported cases from 1966 were noted in 1967 for all nine U.S. geographic divisions (Table 1); however, the proportion of cases reported from each division to the total number of reported cases for the year did not change significantly between the two years.

Meningococcal infections among military personnel and their dependents decreased approximately 60 percent from the 1966 total of 331 cases to 131 cases in 1967. These 131 cases represent 6.1 percent of the cases reported in 1967; in contrast, in 1966, the military-associated cases comprised 9.8 percent of the reported cases.

In 1967, 367 strains of *Neisseria meningitidis* were submitted to NCDC for laboratory analysis. These strains

Table 1
**Meningococcal Infection - United States
1966 - 1967**

Division	1966		1967	
	Cases	Percent	Cases	Percent
North East	159	4.7	87	4.0
Middle Atlantic	428	12.6	357	16.5
East North Central	536	15.9	296	13.7
West North Central	178	5.3	103	4.8
South Atlantic	597	17.6	425	19.6
East South Central	293	8.7	179	8.3
West South Central	455	13.4	276	12.7
Mountain	93	2.8	41	1.9
Pacific	642	19.0	400	18.5
U.S. Total	3,381	100.0	2,164	100.0

had been isolated mainly from blood or spinal fluid of patients. Consistent with the findings in recent years, the predominant serogroup was group B (Table 2). Of 356 meningococcal strains subjected to sulfadiazine sensitivity tests, 157 strains (43.3 percent) were not inhibited by 1.0 mg. percent of sulfadiazine. In 1966, 40 percent of the strains tested were not inhibited by a similar concentration of sulfadiazine.

Table 2
**Strains of *Neisseria meningitidis* Submitted to NCDC
1967***

Serogroup	Number	Percent
A	2	0.5
B	242	66.0
C	76	20.7
D	0	0.0
X	1	0.3
Y	27	7.4
Z	8	2.2
Not typed and "rough" strains	11	2.9
TOTAL	367	100.0

*Excludes 22 isolates presently being processed.

(Reported by the Bacterial Diseases Section, Epidemiology Program, and the Bacterial Serology Unit, Bacteriology Section, Laboratory Program, NCDC.)

EPIDEMIOLOGIC NOTES AND REPORTS
RABIES IN A CAT FOLLOWING VACCINATION WITH LEP VACCINE - Pennsylvania

A cat that had been vaccinated against rabies with chick-embryo low egg passage modified live virus vaccine (LEP) in September 1961, October 1964, and September 1967, developed rabies in October 1967 and died. On September 29, 1967, after being vaccinated on September 7,

the cat began walking with a unilateral hind leg lameness of unexplained origin. The veterinarian could not recall into which leg he had injected the vaccine on September 7. On October 1, he examined the animal, and found it to be

(Continued on page 34)

RABIES IN CAT - (Continued from page 33)

suffering from generalized posterior ataxia. The cat seemed to be in pain and was unruly when handled. Body temperature and front leg reflexes were normal. On October 4, an ascending paralysis of both hind legs began, followed by generalized paralysis, and death on October 9. A provisional diagnosis of vaccine-associated rabies was made; the diagnosis was confirmed by fluorescent antibody and mouse inoculation tests.

A veterinary helper and the cat's owner were bitten by the cat on October 1 and 3, respectively. Both persons underwent antirabies treatment without any untoward effects.

FATAL CASE OF MALARIA - Delaware

In the United States in 1967, only one fatal case of malaria was reported to NCDC. The patient was a 43-year-old American civilian flight engineer who arrived on November 16, 1967, in New York City from Lisbon, Portugal. At that time, he experienced high fevers, chills, and lethargy. He stayed in a hotel in New York City until November 18 when he traveled to his home in Delaware. On November 22, he was admitted to a Delaware hospital in semi-stuporous condition with persistent chills, fever, sweats, abdominal pain, diarrhea, and vomiting. His temperature was 103°F. The differential diagnoses included cholangitis, hepatitis, and cirrhosis. The hematocrit dropped from 42 percent on admission to 31 percent on November 24. During this time, the BUN increased from 33 to 82 mg. percent, and the total bilirubin from 3.6 to 10 mg. percent. Examination of peripheral blood smears on November 24 revealed a heavy infection with *Plasmodium falciparum* parasites. Antimalarial treatment was ordered, but the patient died within a few hours. Autopsy

(Reported by E. J. Witte, V.M.D., Chief, Veterinary Public Health Section, Pennsylvania Department of Health.)

Editorial Comment: This incident emphasizes the necessity of following the manufacturer's recommendations concerning LEP vaccine. This vaccine is intended for use in dogs and cannot be given safely to any other species. It does not cause viremia and is not present in the central nervous system (CNS) of dogs after injections except rarely in very young puppies, but may be found in the CNS of other species if they become ill as a result of the vaccination. For vaccinating cats against rabies, killed vaccine or chick-embryo high egg passage vaccine (HEP) is recommended.

revealed pigmentation of liver, spleen, and edema of the brain with widespread presence of *P. falciparum* parasites in these organs.

The patient had been employed from 1961 to 1963 by an airline in the Congo. Until September 14, 1967, his flight schedule included flights in Europe and other continents, including South America and, possibly, Asia. His travel movements during the 2-month period prior to November 16, 1967, included visits to Portuguese Guinea, and, possibly, other West African countries.

(Reported by G. K. Berger, M.D., Wilmington, Delaware; F. I. Hudson, M.D., Executive Secretary and State Epidemiologist, and E. P. Gliva, M.D., Deputy State Health Officer, Delaware State Board of Health; and an EIS Officer.)

Editorial Comment: The history of this patient emphasizes the importance of considering the possibility of malaria infection in patients with fever who have traveled in malarious countries.

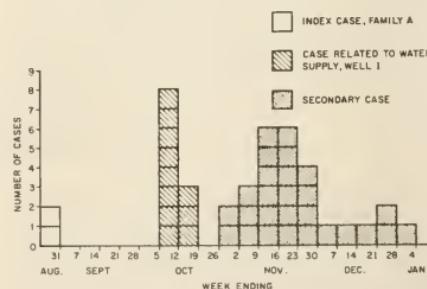
HEPATITIS OUTBREAK - Amboy, Washington

From 1964 to September 1967, no cases of hepatitis were reported from Amboy, Washington (1960 population 1,476); however, from August 29 through December 30, 1967, 40 cases of viral hepatitis were reported from Amboy. Investigation revealed that 13 cases were related to a single private well (Well I) in Amboy, including two index cases with date of onset on August 29, and 11 cases with dates of onset between October 6 and 19 (Figure 4). The remaining 27 cases were secondary to the common source outbreak; these cases had dates of onset between November 1 and December 30.

Cases Directly Related to Well I

The two index cases were a mother and her daughter (family A), living in a trailer near Well I. Shortly after onset of illness in family A, family A moved their trailer to another location. Histories obtained from the mother and daughter in family A did not reveal the source of their

Figure 4

CASES OF VIRAL HEPATITIS BY WEEK OF ONSET
AMBOY, WASHINGTON - AUGUST-DECEMBER 1967

infections. The site near Well I was vacant until September 15, when family B moved into that trailer lot. Within 5 weeks of family B's arrival, the 11 other cases of hepatitis related to Well I occurred among family B and visitors to their trailer. It is important to note that family A had no history of contact with family B or with any of the other cases related to Well I.

Of the five members of family B, four developed hepatitis from 22 to 35 days after moving into the area. A fifth case, with date of onset on October 18, occurred in a relative of family B who had visited in the trailer from September 17 to September 22. Four other cases occurred among 10 guests who attended one of two dinners given by family B on September 15 and 20. The menus served at the two dinners were different except for water. Of the six non-ill guests, four did not drink any water served at the dinners. Two other cases occurred in grandchildren of family B. These children visited the trailer frequently, drank water from Well I, but did not attend either of the dinners. Their dates of onset were October 9 and 15. Among these 11 cases related to Well I, six were less than 20 years of age, and five were over 20 (Table 3).

Table 3
Cases of Viral Hepatitis by Age and
Probable Mode of Transmission
Amboy, Washington - August-December 1967

Age	Cases Related to Well A*		Secondary Cases Spread by Person-to Person Transmission	
	Number	Cumulative Percent	Number	Cumulative Percent
1-4	0	0	1	4
5-9	4	36	13	52
10-14	1	45	4	67
15-19	1	55	4	81
20-29	4	91	1	85
30-39	0	91	3	96
40+	1	100	1	100
Total	11	100	27	100

*Two index cases not included.

A sanitarian who inspected Well I on October 23, 1967, found the well unsatisfactory due to its depth (15 feet), construction (hand dug), and close proximity to the septic tank (16 feet). A water sample, taken on the day of inspection, had a coliform count compatible with sewage contamination. A dead mole was found in the well, and mole tunnels were seen to enter it. The well was condemned on the day of inspection. Fluorescein dye studies conducted later demonstrated leakage of dye from the sewage system onto the ground near the well.

Secondary Cases

Among the 27 secondary cases, 22 were in persons less than 20 years of age, and 5 in persons greater than 20 years of age (Table 1) in contrast with the age distribution of cases related to Well I. Three cases occurred in families of two cases related to Well I. One of these families (family C - one original case and two secondary cases) lives in an area called Amboy Vista, a development consisting of six low rental housing units with a common water source (Well II), and an area where a high degree of social intermingling occurs among families. This was the first family to develop hepatitis in this development area.

From November 1 to December 30, 11 other cases occurred in Amboy Vista families. Of these 11 cases, eight were in children age 10 years or under and two of the remaining three cases were in adults in a household with earlier cases. A third case, a 15-year old boy, was the only one in his family. Since family C experienced the first case of hepatitis in the Amboy Vista area, attention is focused on them as a possible means of spread in this neighborhood. Although only one child of this family had overt hepatitis, the other children might have had subclinical illnesses in late October or early November (a transaminase determination was abnormal in mid-January on one of these children). Since coliform counts of water samples from Well II were negative and since the well is located 250 feet from the septic tank and at a considerably higher elevation, it appears that Amboy Vista cases resulted from person to person transmission, possibly involving anticeric or unrecognized cases in the area.

Two of the remaining secondary cases (plus one who lived in Amboy Vista) gave histories of frequent and moderately close contact with a hepatitis case in family B whose date of onset was October 12. Dates of onset of these three secondary cases were November 1, 9, and 9. Of the other 11 cases, nine were in students at Amboy School; their dates of onset ranged from November 10 to December 25. These cases had probable exposures to other ill students at the school, either to the three cases in children, directly related to Well I, or to the eight children who live in Amboy Vista. The remaining two secondary cases were the parents of one school case.

The epidemic of hepatitis which occurred in Amboy, during the later months of 1967 consisted of two parts: an initial common source outbreak related to a contaminated water supply, followed by 27 cases probably resulting from person to person transmission in households and in the school.

(Reported by Byron J. Francis, M.D., M.P.H., Head of Communicable Disease Control, Division of Epidemiology, Washington State Department of Health; D. A. Champaign, M.D., M.P.H., Health Officer, Clark-Skamania Health District, Washington; and an EIS Officer.)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

JANUARY 27, 1968 AND JANUARY 28, 1967 (4th WEEK)

AREA	ASEPTIC MENINGITIS		BRI CELLLOSIS	DIPHTHERIA	ENCEPHALITIS				HEPATITIS			MALARIA
					Primary including unsp. cases	Post- Infectious	Serum	Infectious				
	1968	1967	1968	1968	1968	1967	1968	1968	1968	1967	1968	1968
UNITED STATES...	29	38	-	5	14	20	4	81	877	811	45	
NEW ENGLAND...	4	-	-	-	1	1	1	3	24	37	-	
Maine...	-	-	-	-	-	-	-	-	-	5	-	
New Hampshire...	-	-	-	-	-	-	-	-	-	1	-	
Vermont...	-	-	-	-	-	-	-	-	-	-	-	
Massachusetts...	-	-	-	-	-	-	-	-	-	1	-	
Rhode Island...	3	-	-	-	1	-	1	3	10	16	-	
Connecticut...	1	-	-	-	-	-	-	-	4	3	-	
MIDDLE ATLANTIC...	5	9	-	-	5	2	-	23	131	139	11	
New York City...	-	2	-	-	-	-	-	10	44	51	1	
New York, up-State...	-	-	-	-	1	-	-	1	16	39	1	
New Jersey...	2	7	-	-	-	1	-	8	37	21	5	
Pennsylvania...	3	-	-	-	4	1	-	4	34	28	4	
EAST NORTH CENTRAL...	1	4	-	-	3	8	1	2	154	148	-	
Ohio...	-	-	-	-	-	8	1	1	46	30	-	
Indiana...	-	-	-	-	-	-	-	-	4	21	-	
Illinois...	-	1	-	-	1	-	-	1	45	16	-	
Michigan...	1	2	-	-	2	-	-	-	50	63	-	
Wisconsin...	-	1	-	-	-	-	-	-	9	18	-	
WEST NORTH CENTRAL...	1	-	-	-	-	-	1	-	57	47	1	
Minnesota...	1	-	-	-	-	-	-	-	20	13	-	
Iowa...	-	-	-	-	-	-	-	-	11	4	-	
Missouri...	-	-	-	-	-	-	-	-	17	26	-	
North Dakota...	-	-	-	-	-	-	-	-	3	1	-	
South Dakota...	-	-	-	-	-	-	1	-	-	1	-	
Nebraska...	-	-	-	-	-	-	-	-	1	1	-	
Kansas...	-	-	-	-	-	-	-	-	5	1	1	
SOUTH ATLANTIC...	2	3	-	-	1	3	-	1	80	85	7	
Delaware...	-	1	-	-	-	-	-	-	3	5	-	
Maryland...	-	-	-	-	1	1	-	1	11	24	3	
Olst. of Columbia...	-	-	-	-	-	-	-	-	2	-	-	
Virginia...	-	-	-	-	-	2	-	-	4	14	2	
West Virginia...	1	-	-	-	-	-	-	-	9	15	-	
North Carolina...	-	1	-	-	-	-	-	-	5	5	-	
South Carolina...	1	-	-	-	-	-	-	-	3	5	-	
Georgia...	-	-	-	-	-	-	-	-	36	9	2	
Florida...	-	1	-	-	-	-	-	-	7	8	-	
EAST SOUTH CENTRAL...	3	9	-	-	-	-	-	-	78	59	13	
Kentucky...	-	-	-	-	-	-	-	-	27	14	12	
Tennessee...	-	-	-	-	-	-	-	-	30	25	-	
Alabama...	3	9	-	-	-	-	-	-	5	8	1	
Mississippi...	-	-	-	-	-	-	-	-	16	12	-	
WEST SOUTH CENTRAL...	3	1	-	5	2	1	1	1	100	89	3	
Arkansas...	-	-	-	-	-	-	-	-	3	8	1	
Louisiana...	-	-	-	5	1	-	-	1	8	5	2	
Oklahoma...	-	1	-	-	1	-	-	-	23	7	-	
Texas...	3	-	-	-	-	1	1	-	66	69	-	
MOUNTAIN...	-	1	-	-	-	1	-	-	34	49	-	
Montana...	-	-	-	-	-	-	-	-	4	1	-	
Idaho...	-	-	-	-	-	-	-	-	3	3	-	
Wyoming...	-	-	-	-	-	-	-	-	-	7	-	
Colorado...	-	-	-	-	-	1	-	-	3	3	-	
New Mexico...	-	-	-	-	-	-	-	-	9	26	-	
Arizona...	-	1	-	-	-	-	-	-	7	6	-	
Utah...	-	-	-	-	-	-	-	-	8	3	-	
Nevada...	-	-	-	-	-	-	-	-	-	-	-	
PACIFIC...	10	11	-	-	2	4	-	51	219	158	10	
Washington...	-	-	-	-	-	-	-	-	24	16	-	
Oregon...	-	1	-	-	-	-	-	14	9	45	-	
California...	9	9	-	-	2	4	-	37	184	96	10	
Alaska...	-	-	-	-	-	-	-	-	-	-	-	
Hawaii...	1	1	-	-	-	-	-	-	2	1	-	
Puerto Rico...	-	-	-	-	-	-	-	-	1	4	-	

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
JANUARY 27, 1968 AND JANUARY 28, 1967 (4th WEEK) - CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA	
	Cumulative			Cumulative				Paralytic				
	1968	1968	1967	1968	1968	1967		1968	1968	Cum. 1968	1968	
UNITED STATES...	541	1,817	6,011	97	289	235	4,345	-	-	-	546	
NEW ENGLAND.....	19	61	48	4	11	7	465	-	-	-	102	
Maine.....	-	7	5	-	-	1	22	-	-	-	6	
New Hampshire.....	3	3	1	2	2	-	4	-	-	-	-	
Vermont.....	-	-	4	1	1	-	28	-	-	-	-	
Massachusetts.....	8	27	31	-	3	3	265	-	-	-	41	
Rhode Island.....	1	1	2	-	-	-	53	-	-	-	20	
Connecticut.....	7	23	5	1	5	3	93	-	-	-	35	
MIDDLE ATLANTIC.....	40	208	271	2	30	37	272	-	-	-	62	
New York City.....	8	32	34	-	6	7	50	-	-	-	29	
New York, Up-State.....	25	131	68	1	2	11	-	-	-	-	12	
New Jersey.....	4	34	108	-	8	14	222	-	-	-	18	
Pennsylvania.....	3	11	61	1	14	5	-	-	-	-	3	
EAST NORTH CENTRAL.....	201	563	613	9	36	22	1,287	-	-	-	123	
Ohio.....	4	69	57	2	10	9	75	-	-	-	21	
Indiana.....	13	88	96	1	4	3	85	-	-	-	5	
Illinois.....	128	260	62	3	7	4	176	-	-	-	7	
Michigan.....	11	31	161	2	13	4	375	-	-	-	26	
Wisconsin.....	45	115	237	1	2	2	576	-	-	-	64	
WEST NORTH CENTRAL.....	7	62	218	6	21	10	335	-	-	-	21	
Minnesota.....	-	-	11	3	4	1	2	-	-	-	-	
Iowa.....	2	23	38	-	1	2	297	-	-	-	20	
Missouri.....	2	3	8	-	4	3	1	-	-	-	-	
North Dakota.....	2	16	74	-	1	-	29	-	-	-	1	
South Dakota.....	1	3	14	1	3	1	-	-	-	-	-	
Nebraska.....	-	3	73	-	1	2	6	-	-	-	-	
Kansas.....	-	14	NN	2	7	1	-	-	-	-	-	
SOUTH ATLANTIC.....	37	143	689	17	63	44	323	-	-	-	37	
Delaware.....	-	-	3	-	-	-	11	-	-	-	1	
Maryland.....	4	12	7	2	3	6	21	-	-	-	2	
Dist. of Columbia.....	2	2	4	-	1	-	9	-	-	-	-	
Virginia.....	3	19	199	2	6	6	29	-	-	-	2	
West Virginia.....	13	47	121	-	2	8	116	-	-	-	19	
North Carolina.....	1	3	122	5	13	9	-	-	-	-	-	
South Carolina.....	2	4	3	4	12	2	1	-	-	-	2	
Georgia.....	2	2	8	2	7	4	90	-	-	-	-	
Florida.....	10	54	222	2	19	9	46	-	-	-	11	
EAST SOUTH CENTRAL.....	12	39	599	18	24	19	293	-	-	-	19	
Kentucky.....	4	8	86	4	6	6	38	-	-	-	4	
Tennessee.....	-	15	235	3	7	7	186	-	-	-	15	
Alabama.....	3	8	118	1	1	2	29	-	-	-	-	
Mississippi.....	5	8	160	10	10	4	40	-	-	-	-	
WEST SOUTH CENTRAL.....	118	359	1,909	30	67	39	290	-	-	-	25	
Arkansas.....	-	-	253	1	2	-	-	-	-	-	-	
Louisiana.....	-	1	19	4	13	17	1	-	-	-	-	
Oklahoma.....	2	36	456	11	18	2	4	-	-	-	-	
Texas.....	116	322	1,181	14	34	20	285	-	-	-	25	
MOUNTAIN.....	20	72	467	1	3	6	104	-	-	-	22	
Montana.....	1	2	112	-	1	-	18	-	-	-	2	
Idaho.....	-	6	35	-	-	1	14	-	-	-	-	
Wyoming.....	4	17	-	-	-	-	19	-	-	-	3	
Colorado.....	11	26	94	1	1	1	-	-	-	-	15	
New Mexico.....	1	7	73	-	-	3	22	-	-	-	-	
Arizona.....	3	14	66	-	1	-	27	-	-	-	-	
Utah.....	-	-	12	-	-	-	4	-	-	-	2	
Nevada.....	-	-	75	-	-	1	-	-	-	-	-	
PACIFIC.....	87	310	1,197	10	34	51	976	-	-	-	135	
Washington.....	21	87	677	4	6	1	255	-	-	-	29	
Oregon.....	18	76	205	2	3	4	40	-	-	-	20	
California.....	46	133	255	4	25	44	631	-	-	-	79	
Alaska.....	-	-	46	-	-	2	30	-	-	-	4	
Hawaii.....	2	14	14	-	-	-	20	-	-	-	3	
Puerto Rico.....	6	15	166	-	-	1	11	-	-	-	-	

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES
FOR WEEKS ENDED
JANUARY 27, 1968 AND JANUARY 28, 1967 (4th WEEK) - CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER		TETANUS		TULAREMIA		TYPHOID		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1968	1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968	1968	Cum. 1968
UNITED STATES...	11,150	4	5	3	5		1	17	-	2	89	287
NEW ENGLAND.....	1,575	-	-	-	-		-	1	-	-	1	3
Maine.....	20	-	-	-	-		-	-	-	-	1	3
New Hampshire.....	23	-	-	-	-		-	-	-	-	-	-
Vermont.....	25	-	-	-	-		-	-	-	-	-	-
Massachusetts.....	233	-	-	-	-		-	-	-	-	-	-
Rhode Island.....	119	-	-	-	-		-	-	-	-	-	-
Connecticut.....	1,155	-	-	-	-		-	1	-	-	-	-
MIDDLE ATLANTIC.....	303	1	1	-	-		-	5	-	-	2	3
New York City.....	14	-	-	-	-		-	4	-	-	-	-
New York, Up-State.....	197	1	1	-	-		-	1	-	-	1	2
New Jersey.....	NN	-	-	-	-		-	-	-	-	-	-
Pennsylvania.....	92	-	-	-	-		-	-	-	-	1	1
EAST NORTH CENTRAL.....	989	1	2	-	-		1	1	3	-	-	20
Ohio.....	110	-	-	-	-		1	-	-	-	-	8
Indiana.....	165	-	-	-	-		-	-	-	-	-	6
Illinois.....	169	-	-	1	-		-	-	-	-	1	2
Michigan.....	276	1	1	-	1		-	-	-	-	-	2
Wisconsin.....	269	-	-	-	-		-	-	-	-	1	2
WEST NORTH CENTRAL.....	336	-	-	1	1		-	2	-	-	24	50
Minnesota.....	54	-	-	-	-		-	-	-	-	5	10
Iowa.....	125	-	-	-	-		-	-	-	-	9	16
Missouri.....	5	-	-	-	-		-	2	-	-	3	10
North Dakota.....	79	-	-	-	-		-	-	-	-	4	8
South Dakota.....	23	-	-	1	1		-	-	-	-	-	-
Nebraska.....	2	-	-	-	-		-	-	-	-	3	4
Kansas.....	48	-	-	-	-		-	-	-	-	-	2
SOUTH ATLANTIC.....	1,280	-	-	1	1		-	1	-	2	7	31
Delaware.....	12	-	-	-	-		-	-	-	-	-	-
Maryland.....	368	-	-	-	-		-	1	-	-	-	-
Dist. of Columbia.....	11	-	-	-	-		-	-	-	-	-	-
Virginia.....	409	-	-	-	-		-	-	-	2	7	17
West Virginia.....	297	-	-	-	-		-	-	-	-	-	4
North Carolina.....	29	-	-	1	1		-	-	-	-	-	-
South Carolina.....	31	-	-	-	-		-	-	-	-	-	-
Georgia.....	14	-	-	-	-		-	-	-	-	-	3
Florida.....	109	-	-	-	-		-	-	-	-	-	7
EAST SOUTH CENTRAL.....	1,583	-	-	-	-		-	3	-	-	32	113
Kentucky.....	58	-	-	-	-		-	-	-	-	17	42
Tennessee.....	1,307	-	-	-	-		-	3	-	-	14	67
Alabama.....	128	-	-	-	-		-	-	-	-	1	4
Mississippi.....	90	-	-	-	-		-	-	-	-	-	-
WEST SOUTH CENTRAL.....	1,061	1	1	-	-		-	-	-	-	15	52
Arkansas.....	5	-	-	-	-		-	-	-	-	1	4
Louisiana.....	-	-	-	-	-		-	-	-	-	1	4
Oklahoma.....	63	-	-	-	-		-	-	-	-	7	18
Texas.....	993	1	1	-	-		-	-	-	-	6	26
MOUNTAIN.....	1,832	-	-	1	2		-	-	-	-	2	4
Montana.....	53	-	-	-	-		-	-	-	-	-	-
Idaho.....	136	-	-	-	-		-	-	-	-	-	-
Wyoming.....	202	-	-	-	-		-	-	-	-	-	-
Colorado.....	1,032	-	-	1	1		-	-	-	-	-	-
New Mexico.....	220	-	-	-	-		-	-	-	-	-	-
Arizona.....	72	-	-	-	-		-	-	-	-	2	4
Utah.....	117	-	-	-	-		1	-	-	-	-	-
Nevada.....	-	-	-	-	-		-	-	-	-	-	-
PACIFIC.....	2,191	1	1	-	-		-	2	-	-	4	11
Washington.....	1,010	-	-	-	-		-	-	-	-	-	-
Oregon.....	186	-	-	-	-		-	-	-	-	-	-
California.....	921	1	1	-	-		-	2	-	-	4	11
Alaska.....	20	-	-	-	-		-	-	-	-	-	-
Hawaii.....	54	-	-	-	-		-	-	-	-	-	-
Puerto Rico.....	21	-	-	-	-		-	-	-	-	-	-

Week No.

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED JANUARY 27, 1968

4

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes			Under 1 year All Causes	Area	All Causes			Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over	Pneumonia and Influenza All Ages			All Ages	65 years and over			
NEW ENGLAND:					SOUTH ATLANTIC:					
Boston, Mass.	964	648	81	46	Atlanta, Ga.	1,565	883	99	79	
Bridgeport, Conn.	290	183	23	20	Baltimore, Md.	209	100	10	14	
Cambridge, Mass.	66	47	10	2	Charlotte, N. C.	371	221	22	23	
Fall River, Mass.	48	33	-	4	Jacksonville, Fla.	55	25	5	1	
Hartford, Conn.	43	32	3	1	Miami, Fla.	112	61	3	8	
Lowell, Mass.	68	33	3	5	Morfolk, Va.	110	63	2	1	
Lynn, Mass.	51	31	6	3	Richmond, Va.	49	25	5	2	
New Bedford, Mass.	27	19	-	-	Savannah, Ga.	153	87	11	9	
New Haven, Conn.	31	25	1	-	St. Petersburg, Fla.	49	23	4	3	
Providence, R. I.	65	42	2	5	Tampa, Fla.	104	94	6	2	
Somerville, Mass.	94	68	10	3	Washington, D. C.	91	57	13	2	
Springfield, Mass.	13	9	3	-	Wilmington, Del.	206	94	12	9	
Waterbury, Conn.	56	37	10	2		56	33	6	5	
Worcester, Mass.	48	36	-	-						
	64	53	10	1	EAST SOUTH CENTRAL:	978	563	93	34	
MIDDLE ATLANTIC:	3,926	2,400	248	179	Birmingham, Ala.	135	66	7	-	
Albany, N. Y.	50	32	2	4	Chattanooga, Tenn.	91	54	21	4	
Allentown, Pa.	33	25	1	1	Knoxville, Tenn.	81	59	10	-	
Buffalo, N. Y.	154	88	3	8	Louisville, Ky.	235	145	25	8	
Camden, N. J.	42	23	6	3	Memphis, Tenn.	193	99	10	5	
Elizabeth, N. J.	45	28	5	2	Mobile, Ala.	54	28	1	-	
Erie, Pa.	48	28	3	2	Montgomery, Ala.	43	25	5	3	
Jersey City, N. J.	95	67	13	2	Nashville, Tenn.	146	87	14	7	
Newark, N. J.	144	77	9	6						
New York City, N. Y.	1,921	1,167	107	75	WEST SOUTH CENTRAL:	1,632	924	165	76	
Paterson, N. J.	50	25	8	5	Austin, Tex.	54	37	14	-	
Philadelphia, Pa.	575	316	8	40	Baton Rouge, La.	61	34	10	3	
Pittsburgh, Pa.	292	187	18	11	Corpus Christi, Tex.	39	19	4	2	
Reading, Pa.	69	50	10	-	Dallas, Tex.	211	118	19	10	
Rochester, N. Y.	136	91	27	10	El Paso, Tex.	48	27	1	4	
Schenectady, N. Y.	31	24	2	-	Fort Worth, Tex.	112	68	11	7	
Scranton, Pa.	53	35	7	4	Houston, Tex.	266	137	20	7	
Syracuse, N. Y.	51	32	3	1	Little Rock, Ark.	111	80	14	4	
Trenton, N. J.	69	48	8	4	New Orleans, La.	214	106	17	16	
Utica, N. Y.	28	22	5	1	Oklahoma City, Okla.	149	88	10	9	
Yonkers, N. Y.	40	35	3	-	San Antonio, Tex.	161	80	13	9	
					Shreveport, La.	83	50	11	3	
EAST NORTH CENTRAL:	2,990	1,709	151	156	Tulsa, Okla.	123	80	21	2	
Akron, Ohio	53	34	-	3						
Canton, Ohio	41	28	5	1	MOUNTAIN:					
Chicago, Ill.	795	440	32	32	Albuquerque, N. Mex.	512	317	27	30	
Cincinnati, Ohio	221	143	11	8	Colorado Springs, Colo.	40	26	6	-	
Cleveland, Ohio	232	117	16	24	Denver, Colo.	38	26	7	4	
Columbus, Ohio	139	73	2	13	Ogden, Utah	141	81	5	9	
Dayton, Ohio	115	66	9	6	Phoenix, Ariz.	19	17	1	-	
Detroit, Mich.	403	222	12	27	Pueblo, Colo.	123	68	5	9	
Evansville, Ind.	61	37	5	2	Salt Lake City, Utah	26	18	1	-	
Flint, Mich.	49	27	5	3	Tucson, Ariz.	62	37	2	5	
Fort Wayne, Ind.	64	38	6	3		63	44	-	3	
Gary, Ind.	43	17	10	2	PACIFIC:	1,918	1,196	80	70	
Grand Rapids, Mich.	54	42	9	-	Berkeley, Calif.	31	24	1	-	
Indianapolis, Ind.	185	104	4	9	Fresno, Calif.	67	41	3	3	
Madison, Wis.	66	33	2	3	Glendale, Calif.	36	25	2	-	
Milwaukee, Wis.	131	78	6	9	Honolulu, Hawaii	47	28	-	1	
Peoria, Ill.	53	28	-	4	Long Beach, Calif.	92	53	2	3	
Rockford, Ill.	29	19	5	1	Los Angeles, Calif.	461	274	11	14	
South Bend, Ind.	41	24	3	1	Oakland, Calif.	108	62	4	11	
Toledo, Ohio	137	95	7	3	Pasadena, Calif.	49	37	-	1	
Youngstown, Ohio	78	44	2	2	Portland, Oreg.	138	94	3	6	
					Sacramento, Calif.	64	38	2	2	
WEST NORTH CENTRAL:	1,043	723	71	22	San Diego, Calif.	111	62	8	5	
Des Moines, Iowa	77	53	10	5	San Francisco, Calif.	211	127	8	11	
Duluth, Minn.	23	14	4	-	San Jose, Calif.	44	25	2	-	
Kansas City, Kans.	44	27	5	4	Seattle, Wash.	306	194	21	8	
Kansas City, Mo.	183	135	7	1	Spokane, Wash.	93	69	10	5	
Lincoln, Nebr.	35	25	2	-	Tacoma, Wash.	60	43	3	-	
Minneapolis, Minn.	149	99	3	2						
Omaha, Nebr.	81	51	7	3	Total	15,528	9,363	1,015	692	
St. Louis, Mo.	305	206	15	6	Estimated expected no.	13,376	7,756	615	646	
St. Paul, Minn.	75	61	4	-	Cumulative Totals					
Wichita, Kans.	71	52	14	1	including reported corrections for previous weeks					

All Causes, All Ages 61,757
 All Causes, Age 65 and over 37,608
 Pneumonia and Influenza, All Ages 4,053
 All Causes, Under 1 Year of Age 2,542

**INTERNATIONAL NOTES
QUARANTINE MEASURES**

International Information for International Trade
1967-68 edition—Public Health Service Publication No. 384

Page 88

Under Chicago, Illinois, United Air Lines Medical Department, O'Hara Field Station, 60010. Clinic Hours.

Delete: By Appointment

Insert: Friday, 10 a.m. to 11 a.m., by appointment

Page 89

Add:

City and State Monroe, La. 71201

Center Quachita Parish Health Unit
2913 Desiard Street
Telephone 325-0454

Clinic Hours Wednesday 1 to 3 p.m.

Fee None

Page 90

Under Rochester, Minnesota, Mayo Clinic, Clinic Hours.

Delete: Tuesday, 11 a.m., by appointment

Insert: By appointment only

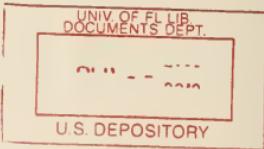
THE MORBIDITY AND MORTALITY WEEKLY REPORT, WITH A CIRCULATION OF 17,000, IS PUBLISHED AT THE NATIONAL COMMUNICABLE DISEASE CENTER, ATLANTA, GEORGIA.

DIRECTOR, NATIONAL COMMUNICABLE DISEASE CENTER DAVID L. SPENCER, M.D.
CHIEF, EPIDEMIOLOGY PROGRAM ROBERT L. LANGRISH, M.D.
ACTING CHIEF, STATISTICS SECTION LOA L. SHERMAN, M.S.
EDITOR MICHAEL B. GREGG, M.D.

IN ADDITION TO THE ESTABLISHED PROCEDURES FOR REPORTING MORBIDITY AND MORTALITY, THE NATIONAL COMMUNICABLE DISEASE CENTER MAINTAINS ACCORDING TO CURRENT PRACTICE, SEVERAL INVESTIGATIONS WHICH ARE OF CURRENT INTEREST TO HEALTH OFFICIALS AND WHICH ARE DIRECTLY RELATED TO THE CONTROL OF COMMUNICABLE DISEASE. THESE COMMUNICATIONS SHOULD BE ADDRESSED TO:
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ATLANTA, GEORGIA 30333
ATTN: THE EDITOR
MORBIDITY AND MORTALITY WEEKLY REPORT

NOTE: THE DATA IN THIS REPORT ARE PROVISIONAL AND ARE BASED ON WEEKLY TELEGRAMS TO THE NCC BY THE INDIVIDUAL STATE HEALTH DEPARTMENTS. THE REPORTING WEEK CONCLUDES ON SATURDAY; COMPILED DATA ON AN ANNUAL BASIS ARE RELEASED ON THE SUCCEEDING FRIDAY.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE
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